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The purpose of this dissertation is to outline a systematic process for the creation of double bass fingerings that will aid the classroom teacher of intermediate to advanced high school bassists in the preparation of common orchestral and solo literature frequently performed by high school all-state and honors orchestras. Five sequential topics will serve as a systematic tool for creating fingerings on the double bass: (1) reverse mapping, (2) bowing coordination, (3) vibrato, (4) tone color, and (5) performance tempo. When paired with any double bass method, these points will function as a support mechanism to the technique, terminology, positions, and vernacular of the chosen method.

Six existing double bass methods were chosen for brief review: *New Method For String Bass* by Franz Simandl; *Méthode Complète Pour la Contrebasse* by Édouard Nanny; *Nuovo Metodo* by Isaia Billè; *Suzuki Bass School* by Shinichi Suzuki; *Nouvelle Technique de la Contrebasse* by Francois Rabbath; and *Progressive Repertoire for the Double Bass* by George Vance. Examination of these methods will help to clarify finger patterns, fingerboard geography, and other idiosyncrasies unique to the double bass. Annotated musical examples provide a detailed description for why fingerings were constructed and how they function in the context of this music.

A SYSTEMATIC APPROACH TO DOUBLE BASS FINGERINGS
FOR THE CLASSROOM STRING TEACHER

by

Cody Rex

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Committee Chair

APPROVAL PAGE

This dissertation written by Cody Rex has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

Committee Chair _____

Committee Members _____

Date of Acceptance by Committee

Date of Final Oral Examination

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CHAPTER I

INTRODUCTION

Efficient and thoughtful double bass fingerings are essential for the execution of any musical passage. Fingerings, in a higher sense, are characterized by an absolute freedom in the use of all mechanical means and possibilities within the domain of the fingerboard.¹ In many instances, there are no fewer than four fingering possibilities for any given note, and the string player must make choices based on many contextual variables, making the process abstract rather than concrete. For the double bassist, the physical distance of the fingerboard requires the player to shift sooner and more frequently than the violin, viola or cello. This further complicates an already complex issue.

In the professional literature, ninety percent of all playing is executed in the first octave on each string, and that is where the player will earn their living.² Double bass pedagogy is somewhat idiosyncratic; therefore many bass methods have become highly individualized and have developed inventive finger patterns, fingerboard positions and pivoting techniques. As a result, many of these methods require private instruction in order to accurately execute the techniques, and few transfer smoothly to a heterogeneous

¹ Eugene Gruenberg, *Violin Teaching and Violin Study, Rules and Hints for Teachers and Students* (New York: C. Fischer, 1919), 69.

classroom setting. The purpose of this dissertation is to outline a systematic process for the creation of double bass fingerings that will aid the classroom teacher of intermediate to advanced high school bassists in the preparation of common orchestral and solo literature frequently performed by high school all-state and honors orchestras.

Overview of Methods

The diverse nature of high school orchestra programs presents a significant challenge for the classroom string teacher. Often, intermediate to advanced double bass students will outgrow day-to-day instruction and seek opportunities outside the classroom. Some common outlets for advanced students include: all-region orchestra, all-state orchestra, youth orchestra, summer camps, or even college auditions. Regardless of the event in which a student participates, the repertoire becomes decidedly more difficult, requiring advanced fingerings that may not be used in a typical high school orchestra. But the responsibility of private instruction may still fall upon the classroom string teacher, which can require them to delve into unfamiliar and confusing territory. Creating bowings and fingerings is a fundamental preparation skill that must be systematically taught, especially at the intermediate to advanced level. At this point, double bass materials and methods become necessary in order to ensure proper instruction and student progress, but the most common methods do not provide context nor strategies for how they might function in orchestral and solo repertoire.

Diverse pedagogical approaches in the United States allow educators to choose from a variety of double bass methods. There is no single recommended method with

which a teacher should instruct double bass students, although, some have clearly become more widely accepted than others over the past 100 years. While numerous method books exist for the classroom orchestra teacher to use, including *Essential Elements 2000*,³ *All for Strings*,⁴ *Strictly Strings*,⁵ and *Sound Innovations*,⁶ only one of these method series includes a fingering diagram. Therefore, the classroom teacher has limited resources for advanced fingerings unless they refer to some of the methods intended for private instruction. Six existing bass methods and materials were chosen for examination in Chapter Two: *New Method For String Bass* by Franz Simandl;⁷ *Méthode Complète Pour la Contrebasse à Quatre et Cinq Cordes* by Édouard Nanny;⁸ *Nuovo Metodo per Contrabbasso* by Isaia Billé;⁹ *Suzuki Bass School* by Shinichi Suzuki;¹⁰ *Nouvelle Technique de la Contrebasse* by François Rabbath;¹¹ and *Progressive Repertoire for the Double Bass* by George Vance.¹² These methods represent both a nationalistic variance in terms of fingering approaches and a chronological variance to outline progression of technique from the nineteenth to the twentieth century.¹³ Concepts such as history and origination of the method, finger pattern structure, fingerboard positions, and transfer to

³ Michael Allen, *Essential Elements 2000: For Strings : a Comprehensive String Method* (Milwaukee: Hal Leonard, 2001).

⁴ Gerald E. Anderson, and Robert S. Frost, *All for Strings : Comprehensive String Method* (San Diego: Kjos, 1986).

⁵ Jacquelyn Dillon-Krass, James Kjelland, and John O'Reilly, *Strictly Strings: A Comprehensive String Method* (Van Nuys: Highland/Etling Pub, 1992).

⁶ Bob Phillips, and Kirk Moss, *Sound Innovations* (Van Nuys: Alfred Pub Co, 2013).

⁷ Franz Simandl, *New Method for String Bass* (New York: International Music Co, 1948).

⁸ Édouard Nanny, *Méthode complète pour la contrebasse à quatre et cinq cordes* (Paris: Alphonse Leduc, 2001).

⁹ Isaia Billé, *Nuovo metodo per contrabbasso* (Milan: Ricordi, 1922).

¹⁰ Shinichi Suzuki, *Suzuki bass school* (Secaucus: Summy-Birchard, 1993).

¹¹ François Rabbath, *Nouvelle technique de la contrebasse: méthode complète et progressive* (Paris: A. Leduc, 1977).

¹² George Vance, Annette Costanzi, François Rabbath, and Elizabeth Azcona-Hartmark, *Progressive repertoire for the double bass* (New York: C. Fischer, 2000).

¹³ Warren Benfield, and James Seay Dean, *The Art of Double Bass Playing* (Evanston: Summy-Birchard Co, 1973), 24.

the classroom of intermediate to advanced high school bassists will be discussed.

Additionally, each method description is accompanied by a modern adaptation of the respective fingerboard diagram created solely for the purpose of this document by its author.

Fingering Application

The noted void in fingering instruction is less a problem inherent to the double bass than it is a global issue of constructing helpful fingerings for all string players. Perhaps one of the most difficult aspects of learning a string instrument is the ability to dissect and interpret a large number of abstract variables. These variables and subtleties involved in mastering a string instrument require careful thought and preparation, and can seem infinite.

Musical variables include desired tone, shifting, tempo, or string crossings. Physical variables include the physical make-up of each student, including size of hand, length and thickness of fingers, or the dimensions and set-up of an instrument, including length and width of neck, length of back, string length, and width of bouts.¹⁴ Geographical variables allow for the fact that any given note may be played in multiple positions on multiple strings on the fingerboard in any given passage. Situational variables may limit a performer to a specific fingering because of a section leader or teacher. Regardless, explaining fingerings in writing is extremely difficult, and many pedagogues prefer to

¹⁴ Robert Gerle, *The Art of Practising the Violin: With Useful Hints for All String Players* (London: Stainer & Bell, 1983), 54.

work through fingerings verbally, or simply write finger numbers into the music for their students. As a result, very little has been published in regards to fingering production.

This document presents five sequential questions that serve as a systematic tool for creating fingerings on the double bass. Primarily, the guide is meant for the classroom string teacher of intermediate to advanced double bassists in a high school orchestra setting, and can be implemented through group or private instruction. When paired with any double bass method, these points will take the classroom teacher through a series of guiding questions, and will function as a support mechanism to the technique, terminology, positions, and vernacular of the chosen method. The five points will expand upon the following concepts: (1) reverse mapping, (2) bowing coordination, (3) vibrato, (4) tone colors, and (5) performance tempi.

Illustrative Repertoire

Chapter four provides fourteen examples of appropriate fingerings in the form of orchestral excerpts and commonly required solo literature that may be performed by all-region orchestras, all-state orchestras, youth symphonies, or summer festivals. This repertoire was carefully chosen to highlight an array of musical and technical demands that bassists will encounter, including but not limited to low register and thumb position, string crossings and shifting, lyrical and short playing, and a variety of tempi.

Annotations provide a detailed description for why fingerings were constructed and how they function in the musical process. For the classroom string teacher, these selections are

only a small sample, but will hopefully provide some context in which the five questions function.

Above all, this dissertation will outline a systematic process for the creation of double bass fingerings that aid the classroom teacher of intermediate to advanced high school bassists in the performance of common orchestral and solo literature frequently performed by high school all-state and honors orchestras. The contents will help to clarify difficulties and idiosyncrasies that are unique to the double bass. It will also guide in creating fingerings for the orchestral and solo repertoire that is transferrable to a variety of double bass methods.

CHAPTER II

EXISTING MATERIALS AND RESOURCES

The materials and resources available for the classroom string teacher to guide intermediate and advanced bassists through the fingering process do not clearly define a systematic or linear approach that would help transfer any of the popular double bass methods to standard orchestral literature. General compendiums of orchestral excerpts, such as the *Complete Double Bass Parts* by Oscar Zimmerman, contain complete bowings and fingerings, but these materials often do not have classroom applications due to a lack of pedagogical guidance or explanation¹⁵. Method books are often rich with technique and skills; however, they are intricate and specific, which limits transfer to everyday use in heterogeneous classroom instruction.

Responsibility for individualized instruction often falls upon the classroom string teacher, which can require delving into uncomfortable and confusing territory. When accessing resources for the intermediate or advanced bassist, there are many acceptable choices; however, the terminology and technical requirements may be confusing for the classroom string teacher. Six popular method books with unique fingering approaches were chosen for review in this chapter:

¹⁵ Oscar Zimmerman, *The Complete Double Bass Parts* (Rochester: Zimmerman, 1970).

1. *New Method For String Bass* by Franz Simandl
2. *Méthode Complète Pour la Contrebasse* by Édouard Nanny
3. *Nuovo Metodo per Contrabbasso* by Isaia Billè
4. *Suzuki Bass School* by Shinichi Suzuki
5. *Nouvelle Technique de la Contrebasse* by François Rabbath
6. *Progressive Repertoire for the Double Bass* by George Vance

These six samples of teaching methods represent a chronological, geographical, and technical variety of double bass pedagogy. More importantly, they are common selections that a classroom teacher may intuitively reference for fingerings. This chapter provides an overview of each method. Points of interest include history and origination of the method, finger structure, fingerboard positions, and transfer to the classroom of intermediate to advanced high school bassists.

Franz Simandl

Franz Simandl was born in 1840, in Blatna, a small town in the South Bohemian Region of the Czech Republic.¹⁶ From 1869–1904, he was the principal bassist of the Vienna Court Opera orchestra and later a member of the Vienna Philharmonic.¹⁷ As an orchestral bassist, Simandl was the primary influence in the development of the underhand (German) bow after the death of Domenico Dragonetti and helped bring the

¹⁶ Nicolas Slonimsky, *Baker's Biographical Dictionary of Musicians* (New York: Schirmer Books, 1992), 689.

¹⁷ Don Michael Randel, *The Harvard Biographical Dictionary of Music* (Cambridge: Belknap Press of Harvard University Press, 1996), 839.

bow nearly to its present state.¹⁸ From 1869–1910, he taught at the Vienna Conservatory and died in Vienna in 1912.¹⁹

Throughout the 18th and 19th centuries, a variety of geographically and culturally isolated double bass fingering systems emerged. The Austro-German and French Schools utilized a 1 – 2 – 4 finger pattern, while the Italian School commonly favored a 1 – 3 – 4 finger pattern, and the English School sometimes even used a crude 1 – 4 pattern that was comically termed “fisticuffs” (Figure 1).²⁰

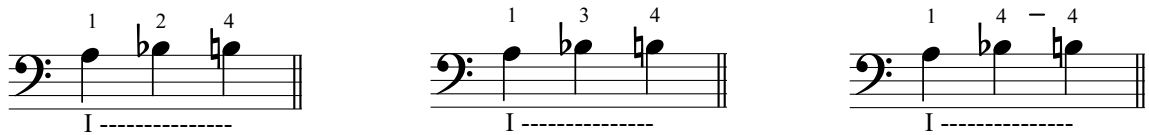


Figure 1. German/French School

Italian School

English School

Simandl’s *New Method for the String Bass* combined the traditional 1 – 2 – 4 finger pattern used in the German School with a logical chromatic progression and numbered fingerboard positions.²¹ This pattern is sometimes referred to as a “block fingering”, in which the 1 – 4 structure of the hand shifts systematically in one solid position and ascends or descends in relation to previous shifts.

The first edition of Simandl’s *New Method for the String Bass* was published in 1881 and has been used internationally as one of the foremost technical guides to the

¹⁸ Christopher Brown, “Discovering Bows for the Double Bass,” *The Strad* vol. 101 (January 1990): 40.

¹⁹ Hugo Riemann, *Encyclopaedic Dictionary of Music* (Philadelphia: Theo. Presser, 1908), 736.

²⁰ Fiona M. Palmer, *Domenico Dragonetti in England (1794-1846): The Career of a Double Bass Virtuoso* (Oxford: Clarendon Press, 1997), 65.

²¹ Simandl, *New Method for String Bass*, vi.

double bass.²² Book 1 of the two-volume method covers the lower positions and Book 2 covers thumb position. Different editions of the *New Method for String Bass* divide the fingerboard into either eight or twelve positions before entering thumb position. Both the 1904 edition by Carl Fischer²³ and the 1968 edition by International Music Company (Figure 3)²⁴ list eight positions. A more recent edition published in 1984 by Carl Fischer (Figure 4) incorporates “half” positions between many of the original Roman numerals.²⁵ In both editions, the bassist ascends through the positions chromatically, maintaining a solid 1 – 2 – 4 hand position in any location on the lower half of the fingerboard.

Thumb position begins at the second partial harmonic, where the thumb assumes responsibilities of the index finger T – 1 – 2 – 3 (Figure 2). The fourth finger is no longer used for any notes in the upper positions. Like 1st position, each of the fingers assumes subsequent chromatic intervals.

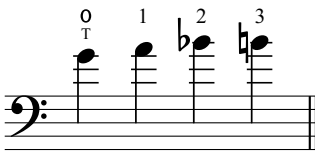


Figure 2. Simandl Thumb Position Finger Pattern

Terminology and functionality of the various editions may introduce problems, even for intermediate to advanced double bass students. The editions that utilize half-

²² Simandl, *New Method for String Bass*, Preface.

²³ Franz Simandl, *New method for the double bass* (New York: Fischer, 1904).

²⁴ Franz Simandl, and Stuart Sankey, *New method for string bass* (New York: International, 1968).

²⁵ Franz Simandl, Frederick Zimmermann, and Lucas Drew, *New method for the double bass* (New York: Fischer, 1984).

positions can be confusing for students and teachers. There are also a variety of language combinations, including English, English and German, and English and Japanese. Sorting through the divided text on each page is tedious and inefficient. Despite language barriers, however, the instructions and abbreviations are clear and user-friendly for bass students and teachers.

The *New Method for String Bass* is perhaps the most transferrable choice for the classroom teacher of intermediate and advanced high school bassists because it teaches bassists the necessary skills to play orchestral music.²⁶ The method is transferrable to a heterogeneous classroom setting due to heavy focus on the lower positions and development of a hand structure that is mobile throughout the lower region of the fingerboard. The 1 – 2 – 4 finger pattern is especially beneficial for young bassists because fingers 3 and 4, the two weakest digits, act as one unit to maintain exact intonation and a strong, well-balanced vibrato with the 4th finger.²⁷

²⁶ Jason Heath, "Rabbath versus Simandl – a comparative study," <http://doublebassblog.org>, (August 26, 2015).

²⁷ Benfield, and Dean, *The Art of Double Bass Playing*, 26.

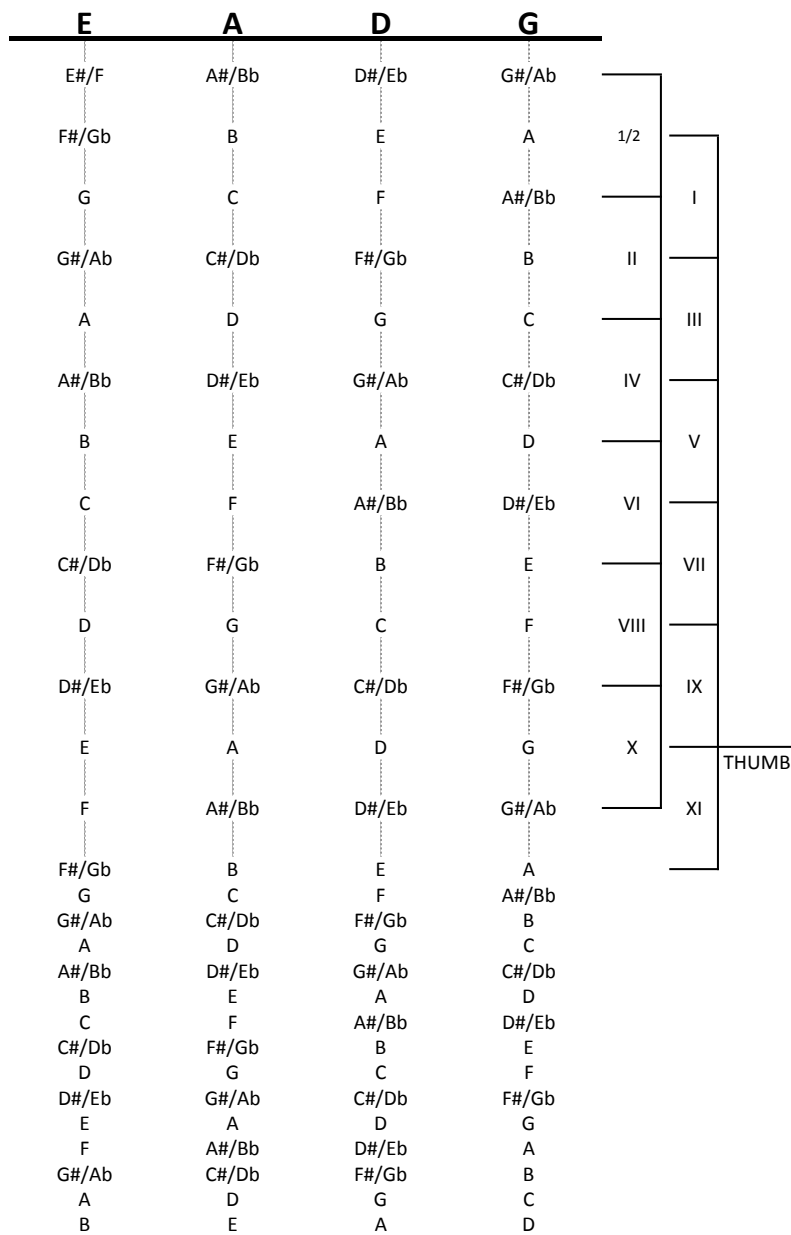


Figure 3. Modern Adaptation of Franz Simandl's *New Method for String Bass* Fingerboard Diagram (1908 Carl Fischer and 1968 International Music Company editions)

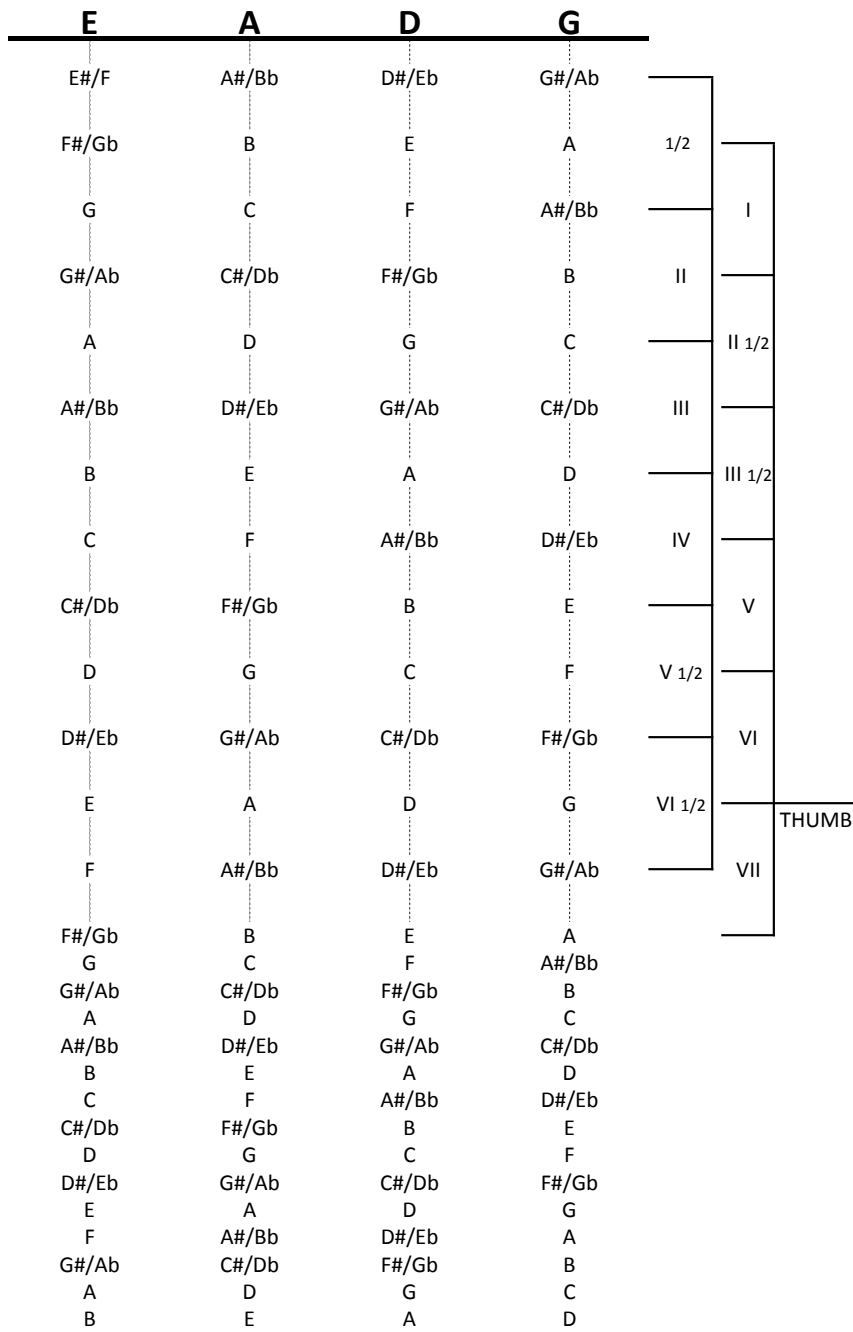


Figure 4. Modern Adaptation of Franz Simandl's *New Method for String Bass* Fingerboard Diagram (1984 Carl Fischer edition)

Édouard Nanny

Édouard Nanny was born in Saint Germain en Laye, France in 1872.²⁸ He studied double bass at the Paris Conservatory and later taught there from 1920–1940.²⁹ Nanny led a varied career in Paris as a renowned educator, a soloist, and an orchestral musician holding positions with the Concerts Lamoureux, and the Opéra Comique.³⁰ He died in Paris in 1943.³¹

The first edition of *Méthode Complète Pour la Contrebasse* was published in 1920.³² Like the German school, Nanny used a 1 – 2 – 4 finger pattern in which fingers 3 and 4 worked as one unit (Figure 5).³³



Figure 5. French School Finger Pattern

Thumb position is presented similarly to the German school. At the half string harmonic, the thumb assumes the index finger's responsibilities (T – 1 – 2 – 3), and the fourth finger is no longer used for any notes in the upper positions. Unlike Simandl's method, Nanny's

²⁸ "Édouard Nanny", <http://www.musicsalesclassical.com>, (August 26, 2015).

²⁹ "Édouard Nanny", <http://www.musicsalesclassical.com/>, (August 26, 2015).

³⁰ "Édouard Nanny", <http://www.musicsalesclassical.com/>, (August 26, 2015).

³¹ "Édouard Nanny", <http://www.musicsalesclassical.com/>, (August 26, 2015).

³² Nanny, *Méthode complète pour la contrebasse à quatre et cinq cordes*.

³³ Nanny, *Méthode complète pour la contrebasse à quatre et cinq cordes*, 4.

method facilitates the expansion of this hand position to accommodate an extra whole step in thumb position (Figure 6).³⁴

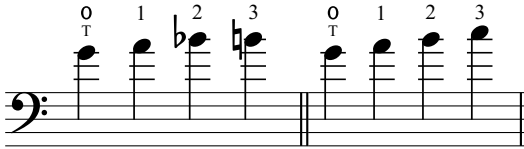


Figure 6. Nanny Thumb Position Finger Pattern and Hand Expansion

The *Méthode Complète Pour la Contrebasse* divides the fingerboard into six positions before thumb position (Figure 8).³⁵ The positions are conceptualized differently than in Simandl’s *New Method for String Bass*. Within each position, there is a “lower degree” and an “upper degree” that overlap by one chromatic interval. Movement between the “lower degree” and “upper degree” is executed when the 1 – 2 – 4 finger pattern shifts slightly on the thumb to cover an additional whole-step plus a half-step (Figure 7).³⁶

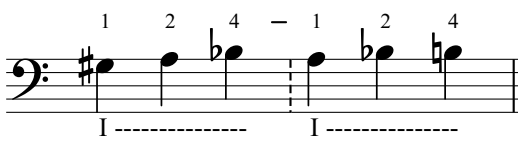
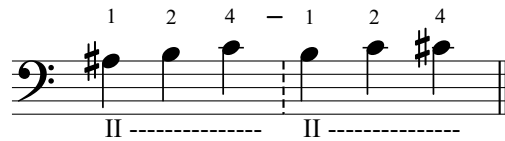


Figure 7. 1st Position “lower – upper degree”



2nd Position “lower – upper degree”

This motion of shifting up or down in position would later become an integral part of Francois Rabbath’s pivoting technique in *Nouvelle Technique de la Contrebasse*.

³⁴ Édouard Nanny, *Vingt études de virtuosité* (Paris: Alphonse Leduc, 1921), 5.

³⁵ Nanny, *Méthode complète pour la contrebasse à quatre et cinq cordes*, 2.

³⁶ Nanny, *Méthode complète pour la contrebasse à quatre et cinq cordes*, 4.

The terminology and functionality of this method may be problematic for intermediate to advanced double bass students. The introduction is printed in French and English, and the exercise instructions are printed in French, English, and German.³⁷ Other language issues arise in reference to the strings and notes, which are written in solfège (sol – re – la – mi – ut).³⁸ A shift is indicated with a line above a number, which is the opposite of Simandl’s *New Method*.³⁹

Transfer to the classroom of intermediate and advanced high school bassists is possible but not recommended. The *Méthode Complète Pour la Contrebasse* offers two strong technical possibilities for incorporation into the heterogeneous classroom. First, the 1 – 2 – 4 finger pattern is beneficial for young bassists because fingers 3 and 4, the two weakest digits, act as one unit. This added strength helps young bassists maintain precise intonation, and a structurally sound vibrato with the 4th finger.⁴⁰ Second, the “lower degree” and “upper degree” may work in a heterogeneous classroom, as violin finger patterns institute a “high” and “low” model, and cello finger patterns institute an “extension”.

³⁷ Nanny, *Méthode complète pour la contrebasse à quatre et cinq cordes*, 5.

³⁸ Nanny, *Méthode complète pour la contrebasse à quatre et cinq cordes*, 2.

³⁹ Nanny, *Méthode complète pour la contrebasse à quatre et cinq cordes*, 33.

⁴⁰ Benfield, and Dean, *The Art of double bass playing*, 26.

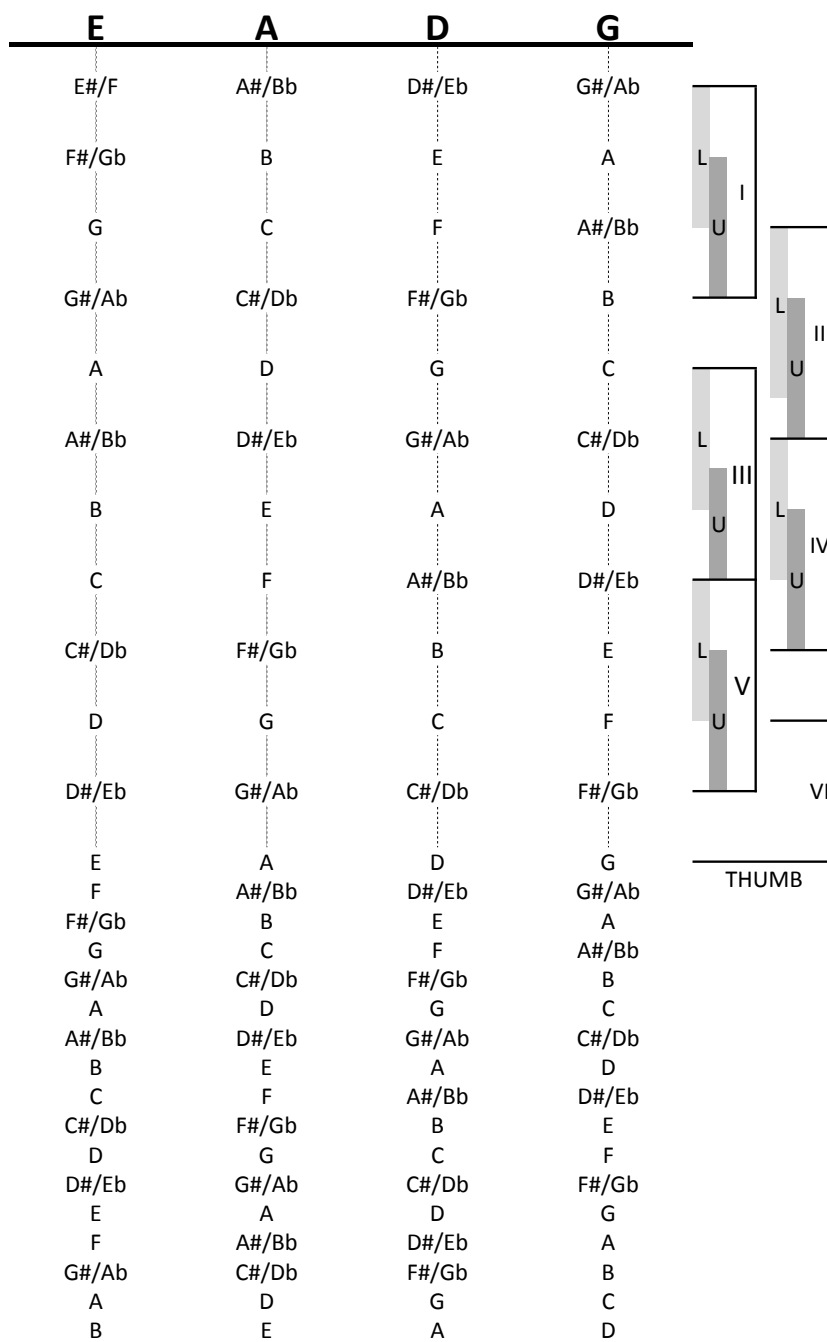


Figure 8. Modern Adaptation of Édouard Nanny's *Méthode Complète Pour la Contrebasse* Fingerboard Diagram

Isaia Billè

Isaia Billè was born in Fermo, Italy in 1874 and died in Fermo Italy in 1961.⁴¹ Billè was an Italian double bass virtuoso who studied at the Rossini Conservatory in Pesaro, Italy and later concertized throughout much of Europe and the United States.⁴² Later, he taught at Italy's premier conservatories, including the Cherubini Institute of Florence and the St Cecilia Academy of Rome.⁴³ Billè published a great deal of technical and musical literature, including a rarely performed Concerto for the double bass in 1934.⁴⁴

The first edition of the *Nuovo Metodo per Contrabbasso* was published in 1922.⁴⁵ The method consists of seven volumes: Part I (books 1 – 4) and Part II (books 4 – 6).⁴⁶ Billè was part of a long lineage of Italian virtuosos, including Domenico Dragonetti and Giovanni Bottesini, and he used the traditional Italian 1 – 3 – 4 finger pattern, in which fingers 2 and 3 work as one digit (Figure 9).⁴⁷

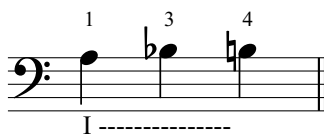


Figure 9. Italian School Finger Pattern

⁴¹ Bill Bentgen, "Isaia Bille," <http://www.billbentgen.com>, (August 28, 2015).

⁴² Philip Albright, "Original Solo Concertos for the Double Bass" DMA thesis, Eastman School of Music, Rochester, 1969, 12.

⁴³ Albright, *Original Solo Concertos for the Double Bass*, 12.

⁴⁴ Albright, *Original Solo Concertos for the Double Bass*, 12.

⁴⁵ Billè, *Nuovo Metodo per Contrabbasso*.

⁴⁶ Billè, *Nuovo Metodo per Contrabbasso*, Index.

⁴⁷ Billè, *Nuovo Metodo per Contrabbasso*, xii.

The *Nuovo Metodo per Contrabbasso* divides the fingerboard into twelve positions prior to thumb position (Figure 10).⁴⁸ Similar to the updated edition of Simandl's *New Method*, the fingerboard divisions use $\frac{1}{2}$ and whole number markers, where whole numbers fall upon the natural notes ascending the fingerboard.⁴⁹ Progression through the positions is similar to Simandl, in that the hand position remains the same and moves chromatically up each string. Though the 1 – 3 – 4 finger pattern leaves the weak fourth finger to work alone, *Nuovo Metodo per Contrabbasso* provides a comprehensive introduction to the fingerboard geography on all strings.

Again, the terminology suffers from a language barrier, with the material in three columns: Italian, French, and English.⁵⁰ Basic instructions are printed in Italian and reference the strings in solfège (sol – re – la – mi – do), Roman numerals (I – II – III – IV – V), and letter names (G – D – A – E – C).⁵¹

Billè's method is one of the least transferrable to the classroom due to the 1 – 3 – 4 finger pattern. Electric bass is a popular instrument with young adults, so students who play it often choose to play the double bass in school orchestra programs. As a result, many bass students use fingers 1 – 2 – 3, and teachers dutifully break the habit. *Nuovo Metodo* may likely enforce bad fingering habits and poor left-hand structure in the classroom.

⁴⁸ Billè, *Nuovo Metodo per Contrabbasso*, xvi.

⁴⁹ Billè, *Nuovo Metodo per Contrabbasso*, xvi.

⁵⁰ Billè, *Nuovo Metodo per Contrabbasso*, Index.

⁵¹ Billè, *Nuovo Metodo per Contrabbasso*, xi.

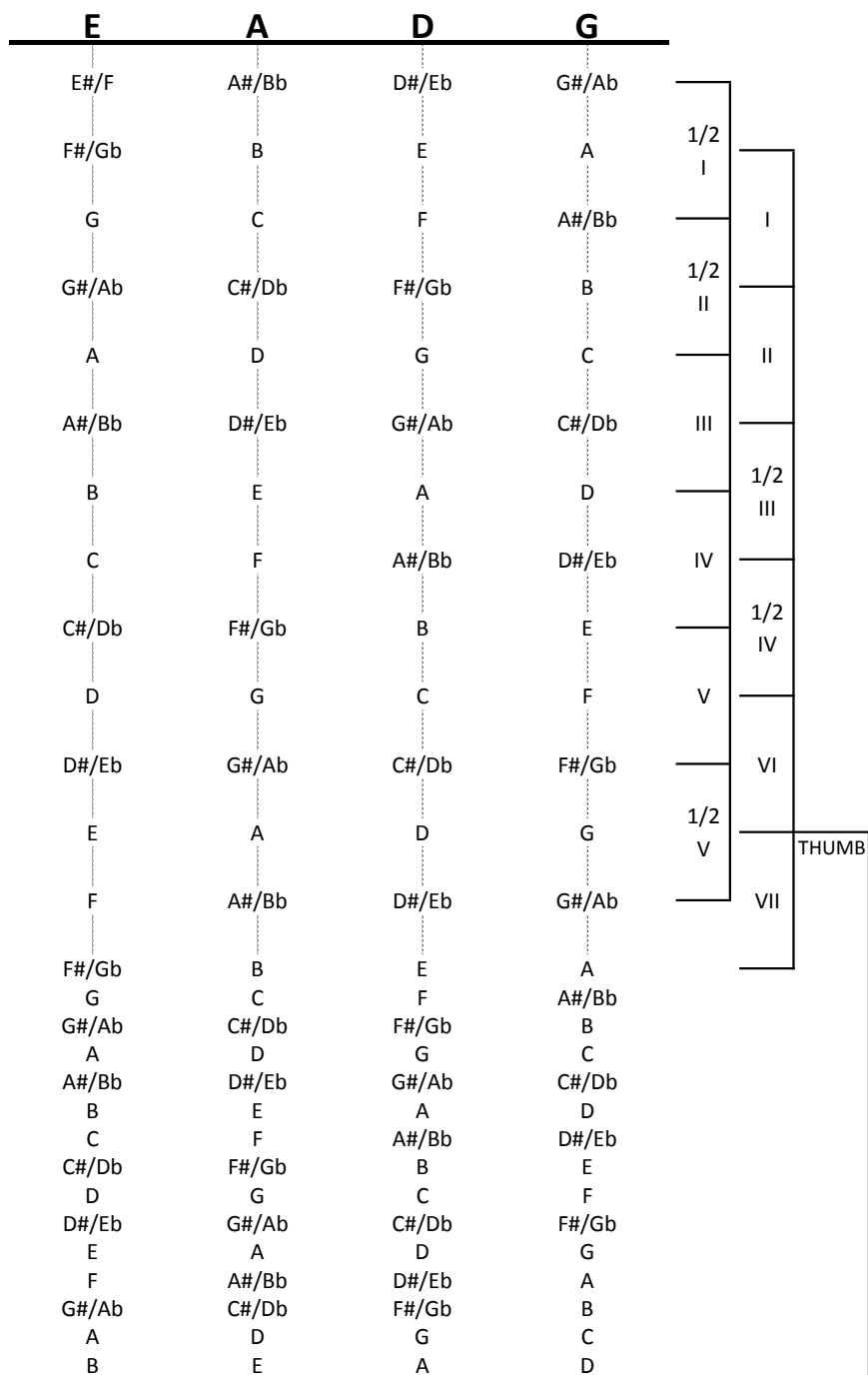


Figure 10. Modern Adaptation of Isaia Billè's *Nuovo Metodo per Contrabbasso* Fingerboard Diagram

Shinichi Suzuki

Shinichi Suzuki was born in 1898 in Nagoya, Japan.⁵² He studied Western music in Germany in the 1920s and began teaching young children in Japan in the 1930s.⁵³ Because Suzuki was trained as a violinist, his teaching method was first applied to violin students, and over many decades was adapted for other string instruments.⁵⁴ The *Suzuki Method* is unique because of the non-musical elements that must accompany practicing. These elements include the following: an early start (age 3–4 years old), listening to recordings, learning by rote before reading music, parental involvement, a nurturing learning environment, Suzuki-trained teachers, good tone production, core (Suzuki) repertoire, and social interaction with other Suzuki students.⁵⁵

The *Suzuki Method* was first published in 1970 for violin,⁵⁶ and the bass method was later published in 1993.⁵⁷ The bass method is comprised of five volumes, each of which offer 10–20 fingered, bowed, and fully notated melodies of increasing difficulty.⁵⁸ The finger patterns and positions are consistent with Simandl's *New Method*, maintaining the 1 – 2 – 4 finger pattern (Figure 11).

⁵² "The Suzuki Method", International Suzuki Association, <http://internationalsuzuki.org>, (September 3, 2015).

⁵³ "The Suzuki Method", International Suzuki Association, <http://internationalsuzuki.org>, (September 3, 2015).

⁵⁴ "The Suzuki Method", International Suzuki Association, <http://internationalsuzuki.org>, (September 3, 2015).

⁵⁵ "The Suzuki Method", International Suzuki Association, <http://internationalsuzuki.org>, (September 3, 2015).

⁵⁶ Shinichi Suzuki, *Suzuki Violin School - Suzuki Method* (Tokyo: Summy-Brichard, 1970).

⁵⁷ Suzuki, *Suzuki Bass School*.

⁵⁸ "Bass Books Available", International Suzuki Association, <http://internationalsuzuki.org>, (September 3, 2015).



Figure 11. Suzuki Finger Pattern

The fingerboard is divided into seven positions before entering thumb position, though the *Suzuki Method* diverges from Simandl's *New Method* at the progression through positions (Figure 12).⁵⁹ While *New Method* begins in $\frac{1}{2}$ position and progresses consecutively, the *Suzuki Method* begins in 4th position and works backward. Volumes 1 and 2 cover 1st – 6th position, and volumes 3, 4, and 5 cover 1st – thumb position.

Terminology is incredibly concise and logical in each volume. Fingerings and positions, bowings, dynamics, and other musical markings are clear. Shifts are not notated: the positions are written below the staff and instruct when to move the hand.

Although the *Suzuki Method* is highly regarded by many pedagogues and widely implemented as a private lesson curriculum, it was included in this chapter because of popularity and probability of a classroom strings teacher choosing it. Transfer to the classroom is possible, but inefficient. Classroom teachers often begin in the lower positions and ascend the fingerboard to the upper positions. Because the *Suzuki Method* requires bassists to start in the middle of the fingerboard and jump around to various locations, confusion could quickly erupt in a heterogeneous classroom.

⁵⁹ Shinichi Suzuki, *Suzuki bass school*, vol. 5 (Secaucus: Summy-Birchard, 2012).

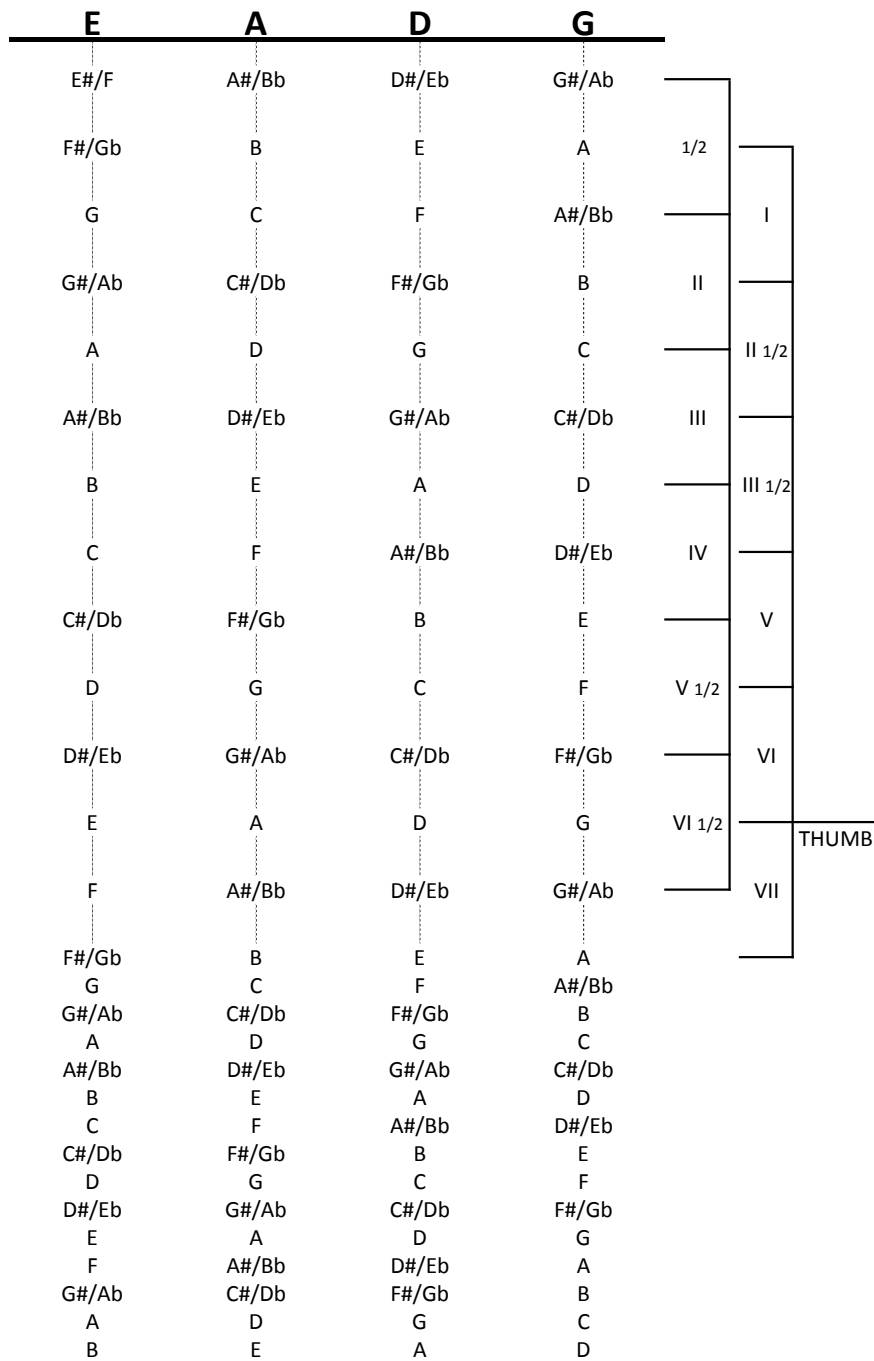


Figure 12. Modern Adaptation of Shinichi Suzuki's *Suzuki Method* Fingerboard Diagram

François Rabbath

François Rabbath was born in 1931 in Aleppo, Syria.⁶⁰ He began playing the double bass in 1944 and was self-taught with the help of Édouard Nanny's *Méthode Complète Pour la Contrebasse*.⁶¹ In 1955, Rabbath moved to France to study at the Paris Conservatory.⁶² In 1964, he released his first recording and launched a successful international solo career.⁶³

The first edition of *Nouvelle Technique de La Contrebasse* was published in 1977.⁶⁴ The method is comprised of four volumes, each offering a variety of scales, exercises, and melodies of increasing difficulty. Volume 1 contains 1st and 2nd positions, Volume 2 contains 3rd and 4th positions, and Volume 3 contains 5th and 6th positions.⁶⁵ The 1 – 2 – 4 finger patterns in *Nouvelle Technique* are consistent with Nanny's *Méthode Complète Pour la Contrebasse* and the French school in general.

The methods diverge slightly as Rabbath's *Nouvelle Technique* divides the fingerboard into six positions that correspond with the natural division of the string at harmonic intervals (Figure 15).⁶⁶ It is important to note that Rabbath includes thumb position in the previously mentioned six positions unlike Simandl, Nanny, Billé, and Suzuki who only numbered positions in the lower half of the fingerboard. Within each of the *Nouvelle Technique* positions are two or three “semitones” or sub positions into

⁶⁰ François Rabbath, *Nouvelle technique de la contrebasse: méthode complète et progressive* (Paris: Leduc, 1977).

⁶¹ Rabbath, *Nouvelle technique de la contrebasse: méthode complète et progressive*.

⁶² Rabbath, *Nouvelle technique de la contrebasse: méthode complète et progressive*.

⁶³ Rabbath, *Nouvelle technique de la contrebasse: méthode complète et progressive*.

⁶⁴ Rabbath, *Nouvelle technique de la contrebasse: méthode complète et progressive*.

⁶⁵ Rabbath, *Nouvelle technique de la contrebasse: méthode complète et progressive*.

⁶⁶ Rabbath, *Nouvelle technique de la contrebasse: méthode complète et progressive*, 7.

which the hand can pivot, similar to the “upper degree” and “lower degree” in Nanny’s *Méthode Complète* (Figure 13 and Figure 14).⁶⁷

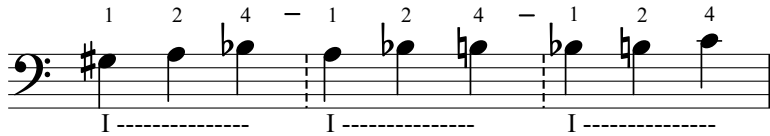


Figure 13. Rabbath 1st Position Pivot

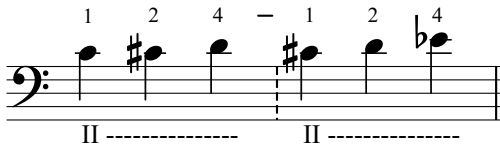


Figure 14. Rabbath 2nd Position Pivot

Terminology and functionality throughout the method may be problematic even for intermediate to advanced double bass students. The introduction is divided into four language columns: French, English, German, and Spanish. Other language issues arise in reference to the strings and notes, which are written in solfège (sol – re – la – mi), letter names (G – D – A – E), and French (1st corde – 2nd corde – 3rd corde – 4th corde). A shift is indicated with a line above a number prior to the shift. The overall organization of instructions in this method is daunting and inefficient for students and teachers.

Nouvelle Technique has gained popularity around the world, not dissimilar from the *Suzuki Method*. It is a highly specialized approach to the double bass and works best in the confines of private instruction and qualified, trained instructors. The pivoting required for the sub-positions can quickly confuse double bass students or lead to poor

⁶⁷ Rabbath, *Nouvelle technique de la contrebasse: méthode complète et progressive*, 7.

left hand structure, and the variety of languages used for instructions add to the confusion. For these reasons, transfer to the classroom of intermediate and advanced high school bassists is not recommended.

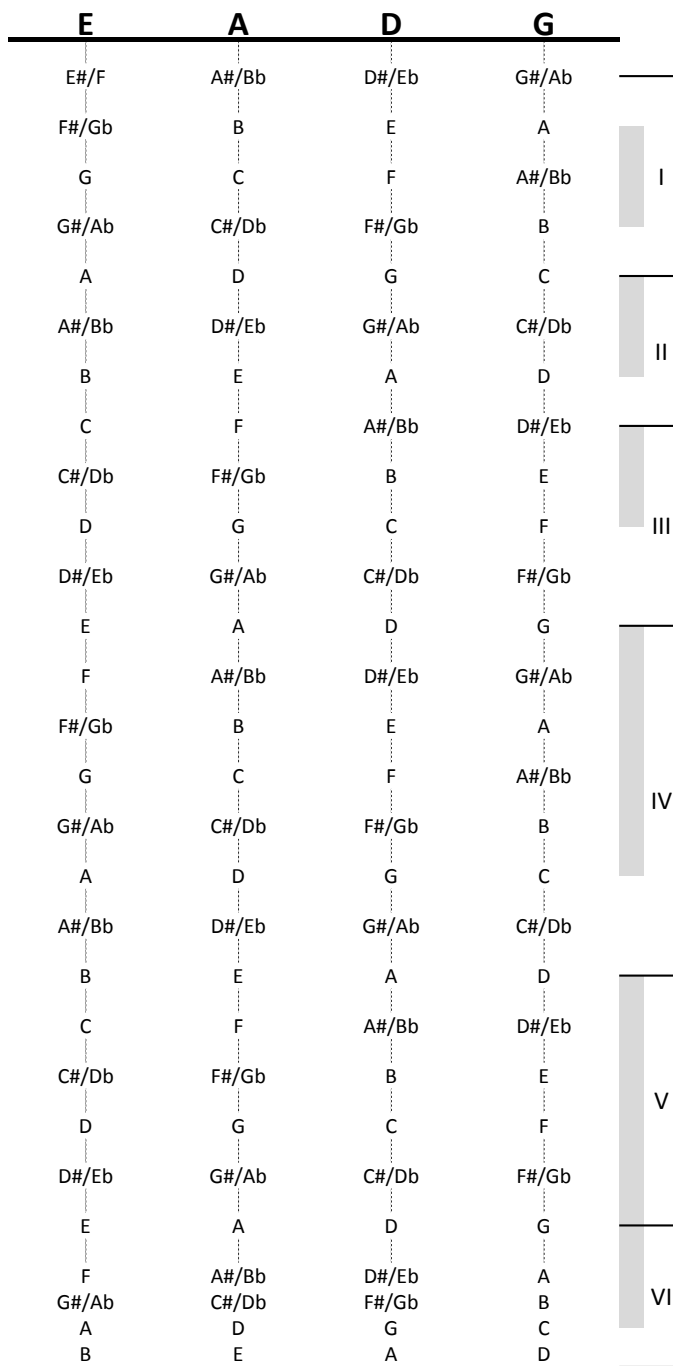


Figure 15. Modern Adaptation of François Rabbath's *Nouvelle Technique de La Contrebasse* Fingerboard Diagram

George Vance

George Vance was born in 1949 in Akron, Ohio.⁶⁸ He studied double bass at Arizona State University and Carnegie Mellon and moved to Washington D.C. in 1978 to join the Army Field Band.⁶⁹ He taught at the University of Maryland and George Mason University and fostered a strong private studio based on the fundamentals of the *Suzuki Method*.⁷⁰

The *Progressive Repertoire for the Double Bass* series was first published in 2000.⁷¹ The method is comprised of three volumes that contain a variety of melodies of increasing difficulty, carefully selected to conceptualize a specific fingering, position, or technique. Vance was a proponent of both Suzuki and Rabbath methods. As a result, *Progressive Repertoire* is a marriage of the two, acting as a precursor to *Nouvelle Technique de la Contrabasse* with the clarity and simplicity of the *Suzuki Method*.⁷²

Vance uses a 1 – 2 – 4 finger pattern and begins students in the same fashion as *Suzuki Method*, but he adapted the fingerboard positions and pivoting techniques from the Rabbath's *Nouvelle Technique* (Figure 16).⁷³ It is important to note that Vance introduces thumb position by the fifth page of melodies in Volume 1.⁷⁴ This transition is remarkably fast yet presented in a non-threatening manner.

⁶⁸ Joe Holley, "George L. Vance Dies," <http://www.washingtonpost.com>, (September 6, 2015).

⁶⁹ Joe Holley, "George L. Vance Dies," <http://www.washingtonpost.com>, (September 6, 2015).

⁷⁰ Joe Holley, "George L. Vance Dies," <http://www.washingtonpost.com>, (September 6, 2015).

⁷¹ Vance, Costanzi, Rabbath, and Azcona-Hartmark, *Progressive repertoire for the double bass*, 1.

⁷² Vance, Costanzi, Rabbath, and Azcona-Hartmark, *Progressive repertoire for the double bass*, 2.

⁷³ Vance, Costanzi, Rabbath, and Azcona-Hartmark, *Progressive repertoire for the double bass*, 5.

⁷⁴ Vance, Costanzi, Rabbath, and Azcona-Hartmark, *Progressive repertoire for the double bass*, 16.

Terminology is incredibly concise and logical in each volume. Fingerings and positions, bowings, dynamics, and other musical markings are clear. Pivots and shifts are explained concisely and notated with a simple dash before the fingering, as in Simandl's *New Method*.

Many pedagogues highly regard and widely implement Vance's *Progressive Repertoire* as a private lesson curriculum, and it was included in this chapter due to its popularity and probability of a classroom strings teacher using it as a resource for intermediate and advanced high school bassists. Transfer to the classroom is possible but not efficient. Classroom teachers often begin in the lower positions and ascend the fingerboard to the upper positions. For this reason, the use of this method by classroom string teachers is not recommended.

E	A	D	G	
E#/F	A#/Bb	D#/Eb	G#/Ab	I
F#/Gb	B	E	A	
G	C	F	A#/Bb	
G#/Ab	C#/Db	F#/Gb	B	
A	D	G	C	II
A#/Bb	D#/Eb	G#/Ab	C#/Db	
B	E	A	D	
C	F	A#/Bb	D#/Eb	
C#/Db	F#/Gb	B	E	III
D	G	C	F	
D#/Eb	G#/Ab	C#/Db	F#/Gb	
E	A	D	G	
F	A#/Bb	D#/Eb	G#/Ab	IV
F#/Gb	B	E	A	
G	C	F	A#/Bb	
G#/Ab	C#/Db	F#/Gb	B	
A	D	G	C	V
A#/Bb	D#/Eb	G#/Ab	C#/Db	
B	E	A	D	
C	F	A#/Bb	D#/Eb	
C#/Db	F#/Gb	B	E	VI
D	G	C	F	
D#/Eb	G#/Ab	C#/Db	F#/Gb	
E	A	D	G	
F	A#/Bb	D#/Eb	A	
G#/Ab	C#/Db	F#/Gb	B	
A	D	G	C	
B	E	A	D	

Figure 16. Modern Adaptation of George Vance's *Progressive Repertoire for the Double Bass* Fingerboard Diagram

Each of the listed methods is highly regarded and widely used throughout the modern bass community; however, many of them do not transfer smoothly to orchestral study or classroom pedagogy. Franz Simandl's *New Method for String Bass* is a highly successful technical approach that functions well in a heterogeneous classroom setting due to heavy focus on the lower positions and development of a left-hand structure that is mobile to the lower areas of the fingerboard. The 1 – 2 – 4 finger pattern is especially beneficial for young bassists because fingers 3 and 4 act as one unit. This added strength helps young bassists maintain a consistent left-hand structure, exact intonation, and a strong, well-balanced vibrato with the 4th finger. For these reasons, *New Method for String Bass* will be used as the foundation with which to exemplify the fingering process in chapters three and four.

CHAPTER III

APPROACHING FINGERINGS

The process of choosing fingerings in double bass repertoire can be overwhelming for string teachers due to a lack of ground rules, a lack of logical sequence, and a demand to shift more frequently than the violin, viola, or cello. The fingerboard geography of a string instrument allows for a number of fingering possibilities and combinations for any given note. By turning this process into a series of guided and structured steps, string teachers can help young bassists select efficient fingerings that best fit contextual variables of the music. Below are five questions to ask when choosing double bass fingerings:

1. Can I work backwards through this passage?
2. What bowings or slurs impede a block fingering?
3. Is there a point(s) at which I will use vibrato?
4. Stylistically or musically, what tone color am I trying to achieve?
5. What is the ultimate performance tempo?

Reverse Mapping

Working backwards through a passage will help to reach a goal. A helpful goal is to identify the finger upon which to end a passage, or the highest finger possible in a block fingering, exemplified by the traditional Simandl Method 1 – 2 – 4 finger pattern.⁷⁵ Ending on the highest finger – 4th finger in lower passages and 3rd finger in thumb position – allows all previous fingers to be in contact with the string. This creates an ideal left hand structure that facilitates precise intonation, quality tone, efficient vibrato, and preparation for logical fingerings in subsequent passages⁷⁶.

Block fingerings allow the left hand to remain in a designated 1 – 2 – 4 position while ascending a string to create a logical sequence of shifts and play as many notes as possible within that position (Figure 17).⁷⁷

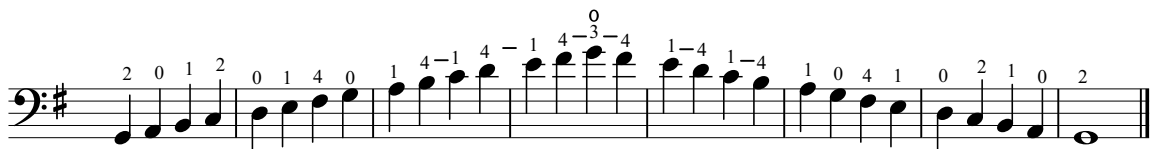


Figure 17. G Major Scale with a 1 – 2 – 4 Block Fingering

Using a block fingering is important because it facilitates a sequence of movement that minimizes shifting, increases efficiency, and decreases energy usage.

⁷⁵ Simandl, *New Method for String Bass*, 17.

⁷⁶ Paul Rolland, and Marla Mutschler, *The Teaching of Action in String Playing, Developmental and Remedial Techniques for Violin and Viola* (Urbana: Illinois String Research Associates, 1974), 106.

⁷⁷ Simandl, *New Method for String Bass*, 20.

A musical example of reverse mapping can be found in Benedetto Marcello's *Sonata in E Minor, Op. 1, No. 2* (Figure 18). The goal is the high E in measure two:

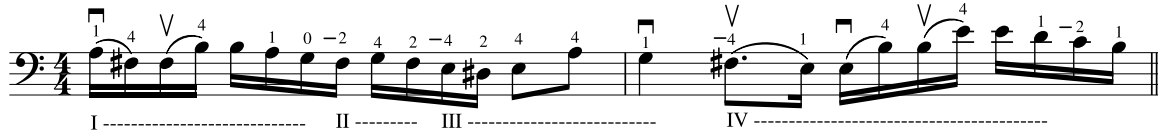


Figure 18. Benedetto Marcello *Sonata in E Minor, Op. 1, No. 2*

The left hand must be in 4th position at this point, and the highest finger possible is 4th finger. Working backwards, beat two in that measure is the earliest point at which the hand can be in 4th position. All of the notes prior must serve as a path to this point, so from the beginning of the excerpt, the left hand crosses strings and consecutively moves through each position before reaching F# in 4th position.

Coordinating Fingerings With Bowings

Slurs and hooked bowings often contradict the block fingering, and force shifts to take place in an unwanted location. Shifting within a slur will result in a portamento, rather than two or more notes played cleanly beneath the bow. Similarly, a hooked bowing requires a shift to coincide with the note values played most closely together to avoid compromising hand coordination.

Articulation is a technique most commonly associated with the bow, referring to the style in which the beginning, middle, and end of notes are executed.⁷⁸ In other realms,

⁷⁸ Jacqueline Leclair, *Oboe Secrets: 75 Performance Strategies for the Advanced Oboist and English Horn Player* (Lanham: Scarecrow Press, 2013), 11.

articulation refers to fluency and cleanliness.⁷⁹ Left hand articulation and articulated fingering exemplify a parallel meaning: notes are cleanly and evenly depressed throughout a passage (Figure 19 and Figure 20). A well-formed left hand structure is essential to making a block fingering successful and comfortable. When string teachers encourage bassists to maintain a quality left hand structure, it facilitates precise intonation, technical efficiency, and more apparent artistry.

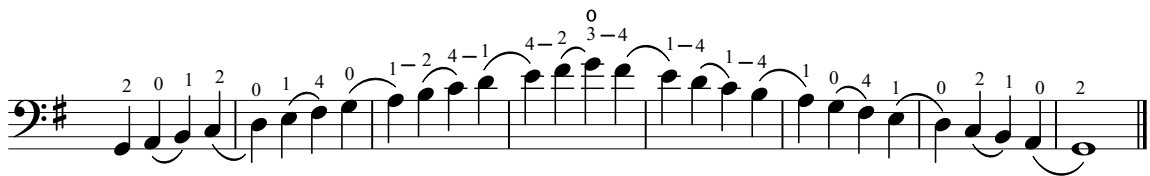


Figure 19. G Major Scale with an Articulated Fingering to Prevent Shifting Beneath a Slur

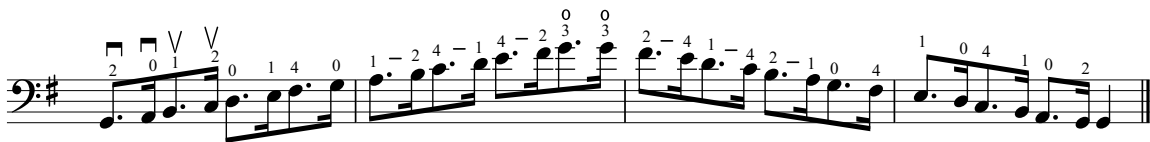


Figure 20. G Major Scale With an Articulated Fingering to Prevent Shifting Between the Shorter Note Values

A contextual example can be found in Benedetto Marcello's *Sonata in E Minor, Op. 1, No. 2* (Figure 21). The two slurred notes at the beginning of each grouping must be articulated so that there is no shift beneath the slur, alleviating a portamento:

⁷⁹ Merriam-Webster's Collegiate Dictionary (Springfield: Merriam-Webster, 2012), 70.



Figure 21. Benedetto Marcello's *Sonata in E Minor, Op. 1, No. 2*

Each of the articulated fingerings starts on 4th finger, which is the highest possible, allowing for lower finger to be ready for subsequent notes in the descending motifs.

Vibrato

Vibrato is a deliberate musical choice. Rather than switching on and off, vibrato must function as a tool with variable speed, intensity, and width. At certain times, vibrato may not even be stylistically appropriate. Regardless of the circumstances, certain fingers can be more beneficial to producing a desired vibrato. Therefore, string teachers must guide their bassists to implement a plan, and arrive at the desired sound appropriately and successfully.

The Trio section from the third movement of Beethoven's *Symphony No. 5* (Figure 22) is an example of choosing a fingering appropriate for vibrato. This famous passage requires a careful examination of the approach from the opening eight-notes, to the first half note. Questions from the previous two steps deduce landing on the highest finger possible, and since the line descends after the half note, fourth finger makes sense. Although the fourth finger is a weaker finger, it has support from fingers two and three, and commands a strong sound. As a result, the first five bars contain three shifts at no

more than a half-step distance each, and sound stylistically appropriate and musically interesting:

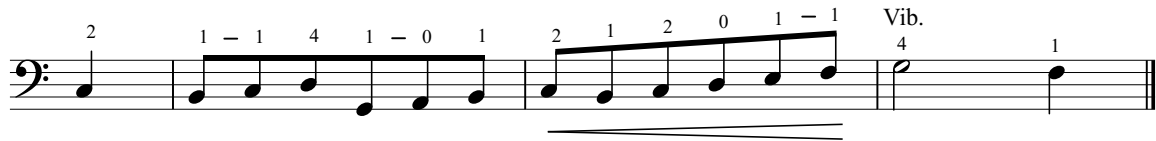


Figure 22. Ludwig van Beethoven *Symphony No. 5*

A common question from young bassists is why open strings are not always an option, as utilizing open strings could eliminate unnecessary shifting. Sometimes, in a very fast passage of continuously moving notes, an open string may be entirely appropriate. However in a slow and lyrical passage, string players are almost always expected to vibrate held notes, and a fingering must be carefully constructed to accommodate appropriate vibrato. An example can be found in Franz Simandl's *Etude No. 17, Tempo di Polacca, in E Minor* (Figure 23):

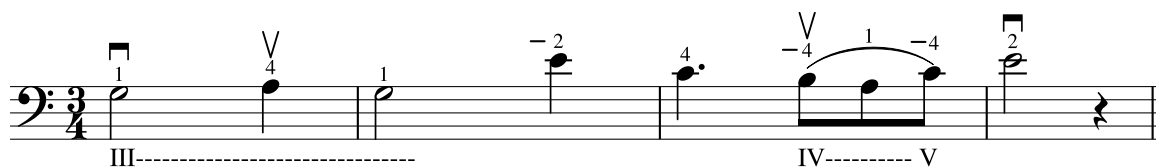


Figure 23. Franz Simandl *Etude No. 17, Tempo di Polacca, in E Minor*

In the measure 1 and measure 2, an open G string could easily be used, however this passage is marked *Cantabile*, a contextual clue which implies that this lyrical development section must be voice-like. Beginning in 3rd position is a more appropriate fingering choice in order to accommodate musical requirements of the passage.

Ultimately, vibrato is only one piece of the puzzle. Landing on a finger that is strong at vibrating may not always be an option, so it is important for teachers to encourage their bassists be able to execute vibrato comfortably and appropriately with any finger.

Musical vs. Technical Choices

String instruments have the unique ability to produce a vast array of tones, colors, and textures. Many variables influence tone production, most of which result from bow manipulation: arm weight, bow speed, and contact point. When choosing fingerings, it is entirely feasible to obtain four very different tone colors while playing the same pitch on four different strings. A fingering that crosses a string in one register will provide a sound different than a fingering that changes register rapidly and ascends only one string.

A fingering choice that favors musicality is illustrated in the beginning of the third movement of Gustav Mahler's *Symphony No. 1*. Bars 3–10 are a famous orchestral solo, featuring the double bass in a minor-key rendering of *Frere Jacques*, in round form. The solo begins shortly after the timpani open with a simple processional pulse. Projection, cleanliness, and lyricism are of concern in this passage. Although there are a number of fingering choices available, one is most commonly used. Mahler stipulates the use of a mute, although it may or may not be used during a performance.

The passage is traditionally played entirely on the G-string because the inner strings and registers of the double bass are very dark. Below are examples of two different fingerings that may be used in this orchestral passage. The first demonstrates a fingering ascending and descending the G-string frequently, but results in a more present

and lyrical sound (Figure 24). The second demonstrates a fingering that remains in thumb position, crosses strings frequently, and eliminates shifts, but provides a darker sound that may be less desirable (Figure 25).

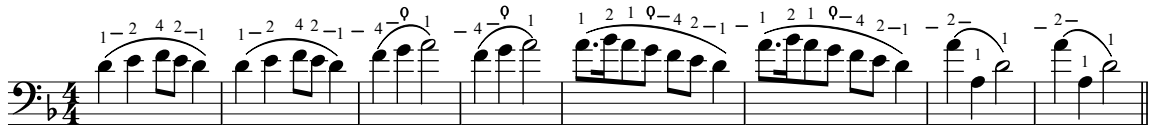


Figure 24. Gustav Mahler *Symphony No. 1*, on the G String

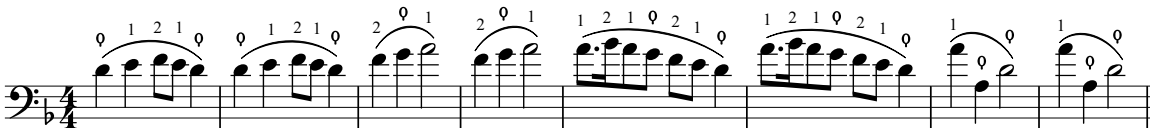


Figure 25. Gustav Mahler *Symphony No. 1*, in Thumb Position

The first movement of Pyotr Ilych Tchaikovsky's *Symphony No. 4* illustrates a fingering choice that helps with technical facility. For twenty bars, beginning at letter P, there is a steady mass of notes that change and jump chromatically at a daunting tempo (Figure 26). In this case, the bass line frequently joins other string sections and portions of the woodwinds at a dynamic marking of triple forte (*fff*). Tone production is secondary to raw power and a large output of sound, and technique is challenging because most of the line is in unison with other sections of the orchestra. A nearly identical fingering assumes a pattern in bars 259–262, then later in bars 269–272, this time one half step higher (Figure 27). In each case, one fingering can be used with success:



Figure 26. Pyotr Ilych Tchaikovsky *Symphony No. 4* Fingerings 1



Figure 27. Pyotr Ilych Tchaikovsky *Symphony No. 4* Fingerings 2

This fingering keeps the left hand in a select few positions and minimizes shifting. The identification of patterns or returning thematic material is also important, making this passage an excellent example of recycling a fingering in a nearly identical recurring line.

Performance Tempo

Slow practice is a highly regarded tool for musicians. It provides the opportunity to deconstruct physical performance barriers and systematically reconnect all of the variables in string playing to execute a passage correctly. From a technical point of view, fingerings that work perfectly at a very slow tempo may be disastrous at a very fast tempo. A fingering that ascends or descends one string for too many notes could be altered to remain in one position that crosses the fingerboard so that shifting is reduced and accuracy is improved.

An example of reduced shifting to play more notes in one position can be found in Antonio Vivaldi's *Sonata No. 5, in E Minor* (Allegro, Quarter note = 110) (Figure 28):



Figure 28. Vivaldi *Sonata No. 5, in E minor*

Rather than jumping sporadically among many positions, this passage can be played at a fast tempo in four positions, with almost the exact same finger pattern in each location. A young bassist can easily maintain the block hand position during and after each shift to improve accuracy and intonation.

A similar example can be found in Benedetto Marcello's *Sonata in E minor, Op. 1, No. 2* (Allegro, Quarter note = 120) (Figure 29):

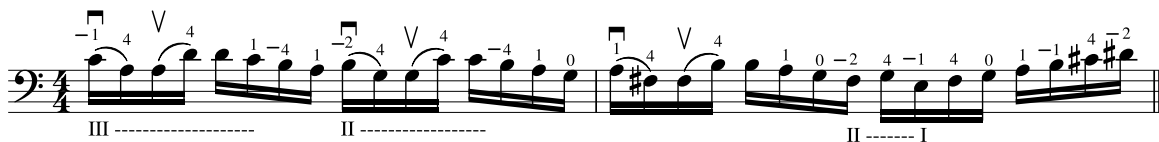


Figure 29. Marcello *Sonata in E minor, Op. 1, No. 2*

Each instance the slurred motif returns, the hand remains in the same block position, only shifting briefly between motifs. At a slow tempo, there may be many different fingering solutions, however physical and musical limitations prevent too much shifting in fast passages.

These fingering principles are meant to serve as a general approach to fingering passages for the double bass. There is no correct answer when creating fingerings, and often, atypical fingerings are better suited to certain students. Careful examination of reverse mapping, bowings, vibrato, tone color, and performance tempi will increase the technical success and efficiency of young bass students. Above all, the five questions presented in this chapter provide a systematic process for the creation of double bass fingerings that will aid the classroom teacher of intermediate to advanced high school bassists in the preparation of common orchestral and solo literature frequently performed by high school all-state and honors orchestras.

CHAPTER IV

MUSICAL EXAMPLES

The examples in this chapter were carefully chosen to exemplify the double bass fingering principles in chapter three. These selections represent a sample of orchestral and solo repertoire most frequently performed by all-state orchestras, youth symphonies, and summer festival orchestras. The four solos included are specifically required repertoire for North Carolina All-State Orchestra auditions and are representative of the performance level required of intermediate to advanced high school double bassists in other regions of the United States.

Each selection highlights possible scenarios in which a string teacher may encounter a difficult passage. A wide range of styles and time periods are used as examples, so that teachers may observe how fingerings work in long and lyrical passages, and fast and separated passages. Additionally, the excerpts chosen represent all areas of the fingerboard, and approach fingering that cross strings as well as those that ascend and descend one string. In addition to printed bowings and fingerings, each excerpt is accompanied by numbered annotations, which relate to specific measures or passages. These notes serve as a guide and explain how the chosen fingerings function in the context of the passage. The annotations provide a visual map to the five questions presented in chapter three, and will aid in transfer and application to other passages.

For the purpose of consistency, fingerings provided in each musical example were created in accordance to the terminology, vernacular, and technical principles outlined in the *New Method for Double Bass* by Franz Simandl. Fingerings are exemplified using Arabic numerals (1, 2, 3, etc.) and where necessary, fingerboard positions are exemplified using Roman numerals (I, II, III, etc.). Shifts are notated using a dash (–) next to fingerings between which the movement of positions occurs. In order to relate the *New Method* fingerboard diagram to octave and position placement in staff notation, the following figure offers a fingering chart that outlines the notes comprising an E Major scale (Figure 30). This chart illustrates the octave, string, position, and finger with which each note in an E major scale should be played, and will help to relate the *New Method for Double Bass* fingering diagram to tangible information found in printed music.

The musical score for the E Major Scale on the staff using Simandl Fingerings and Positions is as follows:

String	Position	Fingering	Note
G	Open Strings	-1	E
G	1/2 Position	2	F#
G	I position	-1	G
G	II position	4	A
D	I position	-1	E
D	II position	4	F#
A	I position	0	G
A	II position	1	A
A	III position	4	B
E	I position	0	G
E	II position	1	A
E	III position	4	B
E	IV position	-2	C
E	IV position	4	D

Figure 30. E Major Scale Outlined on the Staff Using Simandl Fingerings and Positions

The following is a list of repertoire that will be used in this chapter:

1. Ludwig van Beethoven: *Symphony No. 5* (Mvt. III)
2. Wolfgang Amadeus Mozart: *Marriage of Figaro* (Overture)
3. Johannes Brahms: *Symphony No. 2* (Mvt. IV)
4. Wolfgang Amadeus Mozart: *Symphony No. 40* (Mvt. I)
5. Pytor Ilych Tchaikovsky: *Symphony No. 4* (Mvt. I)
6. Dmitri Shostakovich: *Symphony No. 5* (Mvt. I)
7. Sergei Prokofiev: *Lt. Kije* (solo)
8. Gustav Mahler: *Symphony No. 1* (solo)
9. Wolfgang Amadeus Mozart: *Symphony No. 39* (Mvt. I)
10. Johann Sebastian Bach: *Gavotte in G Minor*
11. Benedetto Marcello: *Sonata in E Minor*
12. Antonio Vivaldi: *Sonata in E Minor*
13. Franz Simandl: *Etude No. 17*

Symphony No. 5 (Mvt. III)

Ludwig van Beethoven

① *pp* *poco rit.* *a tempo* *pp*

12 *f* *p* *f* *a tempo* ②

22 *f*

33 *f* *f* *f* *f* (1)

45 *dimin.* *pp* *poco rit.* *a tempo* *pp*

55 ④ *f*

65 ⑤ *cresc.* *f*

74 *f* *f* *f* *f* *dimin.* *pp*

90 *f* *f* *f* *f* *dimin.* *pp*

① The opening of this excerpt requires a very smooth arpeggio beneath a single bow, and the tone color is subtle and dark. The printed fingering in mm. 1–4 creates the correct tone color by ascending the A and D strings first. Additionally, vibrato must be applied to the half notes, so second finger is perhaps the strongest to use at this point.

② This fingering in mm. 21–35 ascends the A string for vibrato and power at the first introduction of *forte*.

③ For consistency, the fingering used in the opening should be retained for this passage as well.

④ The large shift in this passage is difficult because it lands on an A-flat. Working backwards from the G one beat later; it is obvious that this harmonic is an excellent reference point. It is the note at which bassists enter thumb position, so first finger on the A-flat and thumb on G will greatly increase the consistency with which the shift is executed.

⑤ Each of the slurred quarter note figures in mm. 65–71 work as a block fingering. Each bar simply moves up one whole step. The hand position should remain steadfast.

Symphony No. 5
(Mvt. III)

Ludwig van Beethoven

① *f*

②

③ *f*

④

⑤

p

⑥

⑦

⑧

⑨

⑩

⑪

⑫

⑬

⑭

⑮

⑯

⑰

⑱

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① Working backwards, mm. 4 requires vibrato through the half note, and a seamless connection to the quarter note. In order to land on the highest finger possible, ascending the D string to land on fourth finger results in first finger availability for the F-natural.

② The performance tempo of mm. 5–17 is brisk, and as a result, open strings are often used. There are continuous string crossings and shifts, so of primary importance is precision and intonation.

③ For the correct tone color, mm. 23–28 are played on the D string. Keeping the bow on one string for consistency of bow stroke is also beneficial.

④ For consistency, the fingering used in the opening should be retained for this passage as well.

⑤ Open strings are not permissible in mm. 40–54, so one block fingering should be used through the entire octave passage.

Marriage of Figaro
(Overture)

Wolfgang Amadeus Mozart

This musical score is for the bass clef of the Overture to 'The Marriage of Figaro' by Wolfgang Amadeus Mozart. It is written in G major (one sharp) and common time (C). The score is divided into two systems, each with two staves. The first system starts at measure 1 and ends at measure 4. The second system starts at measure 5 and ends at measure 12. The music features a mix of eighth and sixteenth notes, often beamed together. Fingerings are indicated by numbers 1-4 and -1, -2, -4. Dynamics include *pp* (pianissimo) at the beginning, *p* (piano) at measure 8, and *ff* (fortissimo) at the end. Articulation marks include slurs, accents, and breath marks (V). Fingering numbers are placed above or below notes. Measure numbers 5, 8, and 13 are placed at the start of their respective staves. The key signature has one sharp (F#).

① The opening of this excerpt presents challenges in bowings, tone color, and performance tempo. The overture is very fast, so often ascending one string rapidly will increase left hand articulation beneath a long slur at a quiet dynamic. A fingering option in mm. 2 is to use open D on the third eighth note. This provides a split second more time to return to first position and continue up the D string. Working backwards, fourth finger should be the goal for final shift in the passage.

② This fingering is similar to the opening. Fourth finger is the highest finger possible, and the goal upon which the previous fingerings should be based.

③ Proceeding up the A string in mm. 13 avoids a particularly nasty shift back and forth between half position and first position. This reduces the shifts from a potential four shifts to two shifts.

④ To maintain consistency in fingerings and tone, moving up the D string is a more logical choice, and facilitates the hand landing on the highest finger possible – fourth finger.

Symphony No. 2 (Mvt. IV)

Johannes Brahms

①

p sotto voce

8

pp

② ③

16

dim.

④

23

f *sf*

26

sf

29

⑤

31

f *f* *f*

35

f *f* *f*

① The *sotto voce* marking in mm. 1 indicates that the tone color appropriate for this passage should be a softer sound. The A string is most commonly used for most of mm. 1, and mm. 2–6. Beginning on fourth finger D is both the highest finger possible, and places first finger closest to the shift back to B.

② Vibrato should be placed on as many long notes as possible through this section, but most certainly the tied quarter notes. For this reason there is a shift to the E string for G-sharp and A.

③ The *sotto voce* marking should still be observed through mm. 22. The fingerings in these passages facilitate both the correct tone, and left hand articulation beneath long slurs.

④ Restricting fingerings to the A string and D string in mm. 23–24 prevent string crossings to three strings. Additionally, vibrato must be applied to the sforzando B. Fourth finger G allows for second finger vibrato, which is a very reliable solution.

⑤ Working backwards, it is appropriate for each of these ascending sequences to end on the highest finger possible – fourth finger. Additionally, the sequence maintains consistency by using the same fingering in mm. 34–37.

Symphony No. 40
(Mvt. I)

Wolfgang Amadeus Mozart

① D -----
 V
 f

② D -----
 V

③ D -----
 V

④ D -----
 V

⑤ D -----

① Working backwards in the opening, third finger harmonic is the highest finger possible, and at the end of mm. 3, the fingering that will facilitate a block fingering beneath a slur. That leaves two fingering options. The first takes place entirely on the G string, but requires a long shift beneath a slur (B to high G). The second takes place on the D string, and slurs over to the G string on the last quarter note (high G). The second option is cleaner and leaves less possibility for unwanted portamento in mm. 3. The pickup to mm. 4 facilitates a block fingering, as should each of the subsequent slurred figures.

② The performance tempo is often very fast in this movement, which makes the jumps and string crossings very difficult. Due to the lightness and lack of vibrato, open strings are permissible in mm. 6–8, and later in mm. 13–17.

③ A similar fingering should be used to imitate the opening figure.

④ Working backwards, the highest note and highest finger possible is third finger in the G harmonic. The preceding fingering is created accordingly.

⑤ The tone color is more appropriate on the D string rather than the G string.

Symphony No. 4
(Mvt. I)

Pytor Ilych Tchaikovsky

①

②

③

④

⑤

4

8

11

15

18

p

cresc.

mf

p

mf

cresc.

① Beginning on the highest finger possible, this fingering descends using a basic block fingering. Chromatic movement throughout the entire passage requires the performer to remain intently focused on the positions, fingerings, and frequent shifting.

② This slurred dotted-eighth-sixteenth motive occurs frequently throughout the passage. Each time, the fingering should coordinate with the bowing to avoid shifting beneath a slur. This block fingering will facilitate clean rhythm and intonation.

③ Again, the chromatic passages require much thought and planning to make sure that the fingerings are efficient. The printed fingerings in mm. 5–8 allow for a maximum of 6 notes to be played in the same position.

④ A nearly identical fingering can be recycled from mm. 5–8.

⑤ Shifting up the D string will retain the fluidity of the slur, and facilitate the marked crescendo.

Symphony No. 5
(Mvt. I)

Dmitri Shostakovich

① *fff* *ff*

②

③

④

⑤

① The first four notes in mm. 1–2 are marked *fff* with accents. Stylistically, the shift from half position to first position is appropriate because second finger commands a very powerful vibrato and tone.

② Beginning on the highest finger possible with the high B-flat in mm. 3, this descending sequence uses a block fingering which facilitates two precise sixteenth notes beneath a slur. Additionally, this fingering allows a shift between each hand position. A similar fingering is used in the subsequent passage in mm. 5–6.

③ Fingers one and four can be used each time the pattern moves up a step through mm. 9–11.

④ To avoid space between the last beat of mm. 14 and the first beat of mm. 15, this fingering utilizes the thumb twice – once on the G harmonic, and once on the E-flat. This places the hand in position to play the octave E-flat in the next bar without shifting.

⑤ The third finger harmonic is quickly replaced with the thumb to play the last two notes in one position.

Lt. Kije
(Solo)

Sergei Prokofiev

Andante con sord.

(sul G)

mp

solo

①

②

③

④ (sim. - - -)

mf

mf

- ① The block fingering in beats three and four facilitates clear left hand articulation.
- ② Shifting back on the G string rather than crossing to the D string allows for a more artistic vibrato.
- ③ As this is a solo passage, the end of this phrase requires clean, and virtuosic tone on each of the notes in mm. 6. Working backwards, landing on second finger as the highest uses strong fingers in a difficult area of the fingerboard.
- ④ The remainder of the excerpt is identical to the opening.

Symphony No. 1
(Mvt. III Solo)

Gustav Mahler

with mute
(timpani)

solo bass

①

G

②

G

③

G - D - G -

p

① Working backwards, the F in mm. 3 is the highest note, so fourth finger is appropriate.

The slurs also require a block fingering in order to exhibit clean left hand articulation.

② The shift in this bar falls beneath the slur, however the focal point of mm. 5–6 is the high A.

③ Using second finger on the high A and first finger on the low A will allow for a cleaner shift with no portamento, and uninterrupted vibrato on each pitch.

Wolfgang Amadeus Mozart

65

① The basic structure of this fingering will remain constant through the entire excerpt. A shift directly prior to and directly after the slur allows for the hand position to lock in for two very articulated notes beneath the slur. Maintaining consistency with this fingering will improve accuracy and intonation.

② Two open strings are used for this shift. The subsequent E-flat is played with fourth finger, so that the hand is physically closer to the C with first finger.

③ Though fourth finger is a weak finger, and low A-flat is traditionally a problem note on the double bass, it makes the most sense to maintain first position for the F-sharp, A-flat, G.

④ As is the case with the entire excerpt, performance tempo is often very fast. A shift for the last note is dangerous, so using an open string is an option. This fingering forfeits vibrato and tone, but favors intonation and style.

Gavotte in G Minor

Johann Sebastian Bach

① G -----

② V -----

I ----- *p* III^{1/2} -----

5 4 1-2 1 -1 4 -2 1 0 V -4 2 -4 ③ V II ----- *mf*

III^{1/2} ----- III -----

④ II ----- VI ----- V -----

7 -1 3 1-4 2 -4 1 -1 4 4 -1 4 V -4 2 -4 1 0 V -4 2 -4 1 0 III^{1/2} ----- II I ----- III^{1/2} -----

12 0 4 1 0 0 4 1-2 1 -1 4 -2 1 0 V -4 2 -4 1 0 V 4 III^{1/2} ----- III ----- *mf*

17 V 4 V -3 1 -4 2 2 -1 4 -4 2 -4 1 0 V 4 I ----- III -----

21 V 2 V -2 1 2 1 1 -1 4 -2 4 V -0 1 1 *p*

25 4 1-2 1 -1 4 -2 1 0 V -4 2 -4 1 0 1 1 III^{1/2} -----

28 0 4 1 0 0 4 1-2 1 -1 4 -2 1 0 V -4 2 -4 1 0 V 1 III^{1/2} ----- III ----- *f*

① Working backwards, the high D in mm. 1 is a goal note, and should end on 4th finger. Also, the C at the end of the same measure should end on 4th finger. In each instance, a short block finger pattern will ensure arrival at these checkpoints.

② This descending line should also begin on 4th finger, but more importantly, the slur at the beginning of the passage must be articulated so no shift can take place during those two notes.

③ The A at the end of mm. 7 and the G in mm. 8 could easily be played in 1st position, however 3rd position allows for vibrato on the G and an appropriate tone color.

④ This fingering efficiently remains in the upper positions and takes advantage of string crossings, rather than shifting back to lower positions.

⑤ Although this high A could be played in thumb position, the line is descending, so there would be no higher notes. At this point, the highest finger possible is 3rd, so a block fingering beginning on that finger is most appropriate.

Sonata in E Minor, Op. 1, No. 2

Benedetto Marcello

①

②

③

④

⑤

⑥

p *f* *p* *f* *mp* *p*

III I 1/2 I III I

17 ⑤

19 ⑥

21

23

25

27

29

31

33

35

37

39

41

43

45

47

49

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- ① Remaining in 5th position and returning down the D string prevents three large shifts in a row.
- ② The fast tempo of this piece requires as little linear shifting as possible. Therefore, mm. 4-5 remain in 4th or 5th position and cross strings for left hand dexterity.
- ③ A 1 – 2 – 4 block fingering down the G string is most appropriate and efficient in this passage.
- ④ Again, mm. 7-9 can be played entirely in one position for efficiency in a fast tempo.
- ⑤ The slurs in mm. 18-21 require an articulated fingering. Each sequence in these measures follows a very similar pattern.

Sonata in E Minor, (RV 40)

Antonio Vivaldi

① V

mf

② V

mf

II $\frac{1}{2}$ --- III --- II -- I -- II --- I $\frac{1}{2}$ ---

8

p

f

mf

10

I --- II --- I --- II ---

12

mp

I --- II --- II $\frac{1}{2}$ - III --- I ---

14

p

I --- III $\frac{1}{2}$ --- III --- III $\frac{1}{2}$ --- IV --- III --- III $\frac{1}{2}$ ---

17

III -- II $\frac{1}{2}$ --- IV -- III $\frac{1}{2}$ --- I ---

f

I ---

20 3

IV ----- IV ----- V -- IV

mp *mf*

22 4

III 1/2 ----- I ----- III ----- IV ----- III ----- I -----

p

25

I ----- II ----- I ----- II -----

f *mp*

28

III -- II 1/2 -- I ----- I ----- III ----- I -----

30 5

IV ----- III -----

mf

32

II 1/2 ----- I ----- 1/2 ----- I ----- III ----- II -----

p

34

II 1/2 -- III ----- II -- I -- II ----- I ----- 1/2 -----

mf

38

1/2 ----- II ----- I ----- I ----- 1/2 -----

p *f*

- ① The cleanest fingering for the opening bars involves open strings. Due to the fast tempo, there would not be time to shift as would be required.
- ② Though there are great leaps in this passage, crossing strings frequently allows for the left hand to stay in one position for several beats at a time, increasing efficiency.
- ③ This passage can be played entirely in 4th position.
- ④ Working backwards, the high E in mm. 24 is a goal note, and gradually moving up via the slurred motif, a block fingering reaches that goal, and prevents shifting beneath a slur.
- ⑤ Again, each sequence in this passage can be played with the same left hand structure in a new position. This requires little movement and greatly increases efficiency.

Simandl Etude No. 17

Tempo di Polacca, in E Minor

Franz Simandl

①

f

IV-----

III-----V

III/2-----IV

5

III/2-----I

I/2-----

8

I-----

IV-----

III-----V

12

III/2-----IV

III/2-----I

I/2-----

16

I-----

II-----

20

III/2-----

I-----

23

I-----

26

II-----

III/2-----

30

I-----

②

33 ^③ *p* *mf* *p*

43 *mf* *p*

51 *p* *mf*

61 *f* *f* ^④ *sim.*

67

71

74

78

1/2-----

① Working backwards, the B in mm. 2 is a goal note, and along with the G in the same bar, should be vibrated. The chosen fingering ascends the D string to achieve each of these goals.

② Each time this pattern returns, a block fingering must be used.

③ To vibrate and for a change in tone color, this passage is played in 3rd position.

④ For consistency, the exact fingerings from the beginning of the piece should be used in the return section.

CHAPTER V

CONCLUSION

The examination of double bass resources available for the classroom string teacher reveals a distinct lack of guidance in bass technique. Double bass pedagogy is somewhat idiosyncratic; therefore many bass methods have become highly individualized and have developed inventive finger patterns, fingerboard positions and pivoting techniques. As a result, many of these methods require private instruction in order to accurately execute the techniques, and few transfer smoothly to a heterogeneous classroom setting. Examination of six popular double bass methods helps to clarify finger patterns, fingerboard geography, and other idiosyncrasies unique to the double bass, and ultimately the likelihood of transfer to a heterogeneous classroom.

The primary purpose of this document is to assist the classroom teacher of intermediate to advanced high school bassists with the construction of fingerings in common orchestral and solo literature frequently performed by high school all-state and honors orchestras. Five sequential points of interest are identified to form a systematic tool for creating double bass fingerings. When paired with any double bass method, these points function as a support mechanism to the terminology, positions, and vernacular in any bass method.

To illustrate fingering construction on the double bass, repertoire was chosen to represent common orchestral and solo selections from all-state and honors orchestras

across the United States, as well as a variety of musical styles and technical demands.

The pedagogical principles found in Franz Simandl's *New Method for String Bass* were chosen as a foundation in the construction of fingerings. Annotations detail the process and reference each of the five points from chapter three. Each example offers fingerings, bowings, and position markers to help guide the classroom string teacher in fingering construction.

Above all, this document provides an easily accessible supplement for any classroom string teacher. In a field that relies heavily upon aural transmission of musical skills and concepts, it serves as a systemic component in the creation of double bass fingerings. This document helps to fill a void in the global issue of constructing helpful fingerings for all string players.

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